Commissioner for Patents

REMARKS

Claims 2-5 and 9-15 are now in the application.

Claims 1 and 6-8 are canceled from the application.

Claims 2, 9-11, 13 and 14 are herein amended. Claims 9-11 and 13 are now dependent on claim 15.

New claim 15 is inserted into the application.

No new subject matter has been added.

Claim Objections

In item 1, claim 14 is objected to under 37 CFR 1.75(c).

Claim 14 has been amended in response to the Examiner's objection, whereby the objection is traversed.

In item 2, claim 2 is also objected to because of language informalities.

Claim 2 has been amended in response to the Examiner's objection, whereby the objection is traversed.

Claim Rejections – 35 U.S.C. 112

In item 4, claim 6 is rejected under 35 U.S.C. 112.

Claim 6 has been canceled in response to the Examiner's objection, whereby the objection is traversed.

Claim Rejections – 35 U.S.C. 102

Claim 1 is rejected under 35 U.S.C. 102(b) for being anticipated by Foley et al. In response to the Examiner's rejection, claim 1 has been canceled.

Claims 2-5 and 7-13 are rejected under 35 U.S.C. 102(b) for being anticipated by Leis. This rejection is respectfully traversed for the following reasons.

Leis teaches a system for determining the spatial position and orientation of different bodies. Each body comprises at least three light reflective markers. Alternatively, the reflective markers can be replaced by active light sources which are physically connected to a controller. Leis also teaches a method of differentiating and

identifying the different bodies by providing to each body a unique geometrical configuration formed by the markers.

The Examiner alleges the following: *"Regarding claims 2-5, Leis '644 teaches a passive optical interface apparatus* [...] *comprising: at least three passive detectable devices trackable for position."* The Examiner further alleges that the apparatus comprises *"at least a first of the passive detectable devices being displaceable with respect to the object."*

The Applicant respectfully disagrees with this interpretation given to the teachings of Leis. In Leis, each body must have markers in a predetermined (known) and **fixed** relative geometry (col. 2, lines 61-63, col. 3, line 64, to col. 4, line 4, and col. 5, lines 30-33). Each body has markers in a unique relative geometry. This unique relative geometry permits a particular body to be identified and differentiated from another particular body (col. 2, line 67, to col. 3, line 4). It is paramount that this relative geometry **be fixed for** the system to recognize the geometry and calculate the position and orientation. Consequently, the system taught by Leis **cannot identify** the particular body if its markers are not in a **fixed** relative geometry. Leis is limited to the detectable markers being fixed to the body, whereby Leis fails to teach the displacement of a detectable marker with respect to the body being tracked, to initiate an interaction.

The Applicant respectfully submits that the rejection under 35 U.S.C. 102(b) is improper and claim 2 is novel and patentable in view of Leis.

The Examiner also alleges that *"the same reasoning from claims 2-5 applies mutadis mutandis to the subject matter of the corresponding claims 7-13."*

Claim 7 and 8 have been canceled and claim 15 has been added. Claims 9-11 and 13 are now dependent upon claim 15.

In order to determine the spatial position of a body, the first step of the method taught by Leis is the detection of the energy emitted or reflected by at least three markers secured to the body in a predetermined, relative and **fixed** geometric position. The relative position of the markers has to be **fixed**, otherwise the method does permit identification of the body. The second step is the supply of a memory having stored the predetermined, relative and **fixed** geometric position of the markers, and the last step is the comparison of predetermined, relative geometric position with the energy detected in order to identify the

Commissioner for Patents

body and locate its position. The method taught by Leis only enables the identification and the tracking of a body by a computer system. As the markers are in a predetermined, relative and **fixed** geometric position, the method does not teach an initiation of an interaction with the tracking system following *"a displacement of any of the four passive detectable devices with respect to the known geometry,"* as alleged by the Examiner.

Therefore, the Applicant respectfully submits that new claim 15 is compliant with subsection 35 U.S.C. 102(b).

Furthermore, the Applicant submits that claims 3-5 and 9-14 are also patentable over the cited reference for reasons similar to those provided above concerning claims 2 and 7, respectively.

Claim Rejections – 35 U.S.C. §103

Claim 6 is rejected under 35 U.S.C. 103(a) for being obvious having regard to Foley et al. in view of Leis. Claim 6 is canceled, whereby this rejection is moot.

Conclusion

In view of the foregoing, the Applicant believes that all rejections have been overcome and early and favorable notice is earnestly solicited.

Respectfully submitted,
JANSEN, Herbert André
By:

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(Date)

Pierre T. A. NGUYEN (Reg. No. 55,043)
Agent of Record
OGILVY RENAULT LLP
1981 McGill College Avenue, Suite 1600
Montreal, Quebec, Canada H3A 2Y3
Tel.: (514)847-4243